

# New York State Department of Transportation

## PIA Safety Flag NB2358W010

By: Alex Abreu

Flag Date: May 03, 2023

Superseding Information:

No Flags Superseded

### Structure Information

BIN: 1065318

Feature Carried: 278I278IX2M23027

Feature Crossed: 6TH AVENUE

Orientation: 8 - NORTHWEST

Region: 11 - NEW YORK CITY

County: KINGS

Political Unit: City of NEW YORK

Approximate Year Built: 1962

Posted Load Matches Inventory : Yes

Bridge Load Posting (Tons) : Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 322

### Verbal Notification Information

Person Notified: Heinz Joachim, P.E.

Date: May 03, 2023 1:11:00 PM

Of: NYSDOT Region 11

### Signature Information

Signature: Alex Abreu, P.E. 099761-1

Date: May 04, 2023

Reviewed By: Robert Kemp

Date: May 04, 2023

Attachments: 6

**Flagged Elements****No Flagged Elements****Flagged Condition Description**

This Safety PIA Flag No. NB2358W010 is NEW.

Location: Span 288, Lateral Cross Bracing between Girders G2-G3 adjacent to the right side of G2 at Pier 287 above the left shoulder on the exit street from Hamilton Ave. EB roadway to Hamilton Ave. WB roadway.

**Description:**

The portion of the lateral cross bracing leg adjacent to the right side of Girder G2 in Span 288 at Pier 287 exhibits heavy corrosion with severe section loss and several corrosion holes for 18" long section approximately 4ft from the connection to Girder G2 (Photo 3). When the inspection team hammered the location, the lateral cross bracing leg on both sides of the deteriorated area deflected downwards. This deteriorated area at the lateral cross bracing still exhibits delaminated steel but the inspection team did not hammer any further due to the risk of the lateral cross bracing leg separating/breaking completing at this location resulting in two portions of the leg which are only supported at one end of each leg.

The lateral cross bracing connections at the right side of Girder G2, the gusset plate below Stringer S9 (Photo 5), and the bottom of the mid span of Stringer S9 (Photo 6) are in generally good condition with 1/2" pack rust at the G2 connection (Photo 4).

The deteriorated area at the cross bracing is located above the left shoulder on the exit street from Hamilton Ave. EB roadway to Hamilton Ave. WB roadway. The safety concern would be the unbraced portions of the cross bracing legs falling onto the vehicular and pedestrian traffic below.

This is a newly flagged condition.

**Notes:**

1. The location was accessed with 125' manlift and MPT single lane closure on the left shoulder of the exit street from Hamilton EB roadway to Hamilton WB roadway (125' manlift was used but any manlift with at least 80' reach should be sufficient).
2. The previous 2021 Biennial Report documented the above secondary member location as CS3 with the following condition state note:  
The lateral bracing between Girders G2 & G3 at Pier 287 at right side of Girder G2 has severe corrosion with section loss and several corrosion holes (3" x 1"; 1.5" x 1"; 2" x 1") over an 18" L section.

**Flag Photographs**

Photo Number: 1

Photo Filename: 23\_Flag Location Plan.jpg

Gowanus Expressway  
2023 Biennial Inspection - Field Sketch

BIN: 1065318

Team: AA/TS

Date: 05/03/2023

Span: 288

Location: Lateral Bracing btwn G2-G3 at Pier 287

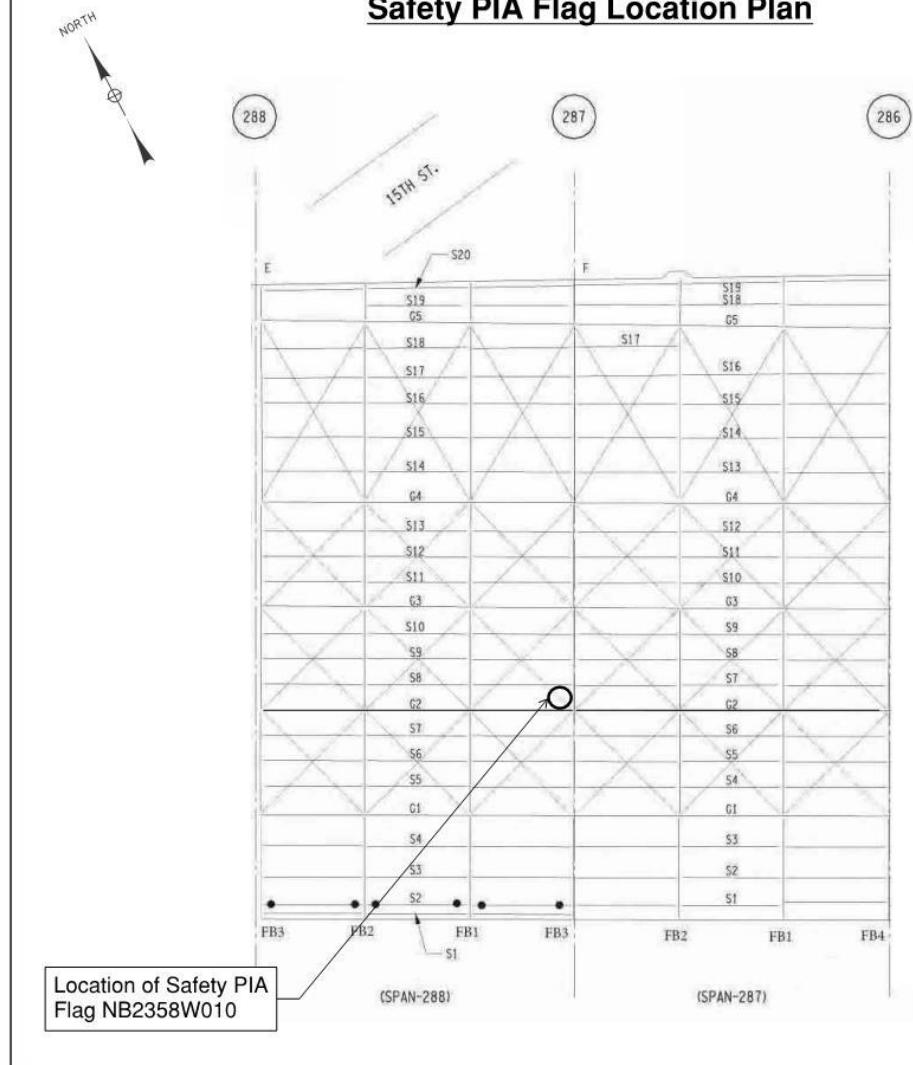
**Safety PIA Flag Location Plan****WSP****Attachment Description: Flag Location Plan**

Photo Number: 2

Photo Filename: 23\_113\_6855.JPG



**Attachment Description:** General view of the flagged condition at the lateral cross bracing at the right side of Girder G2 in Span 288 at Pier 287. Looking Begin.

Photo Number: 3

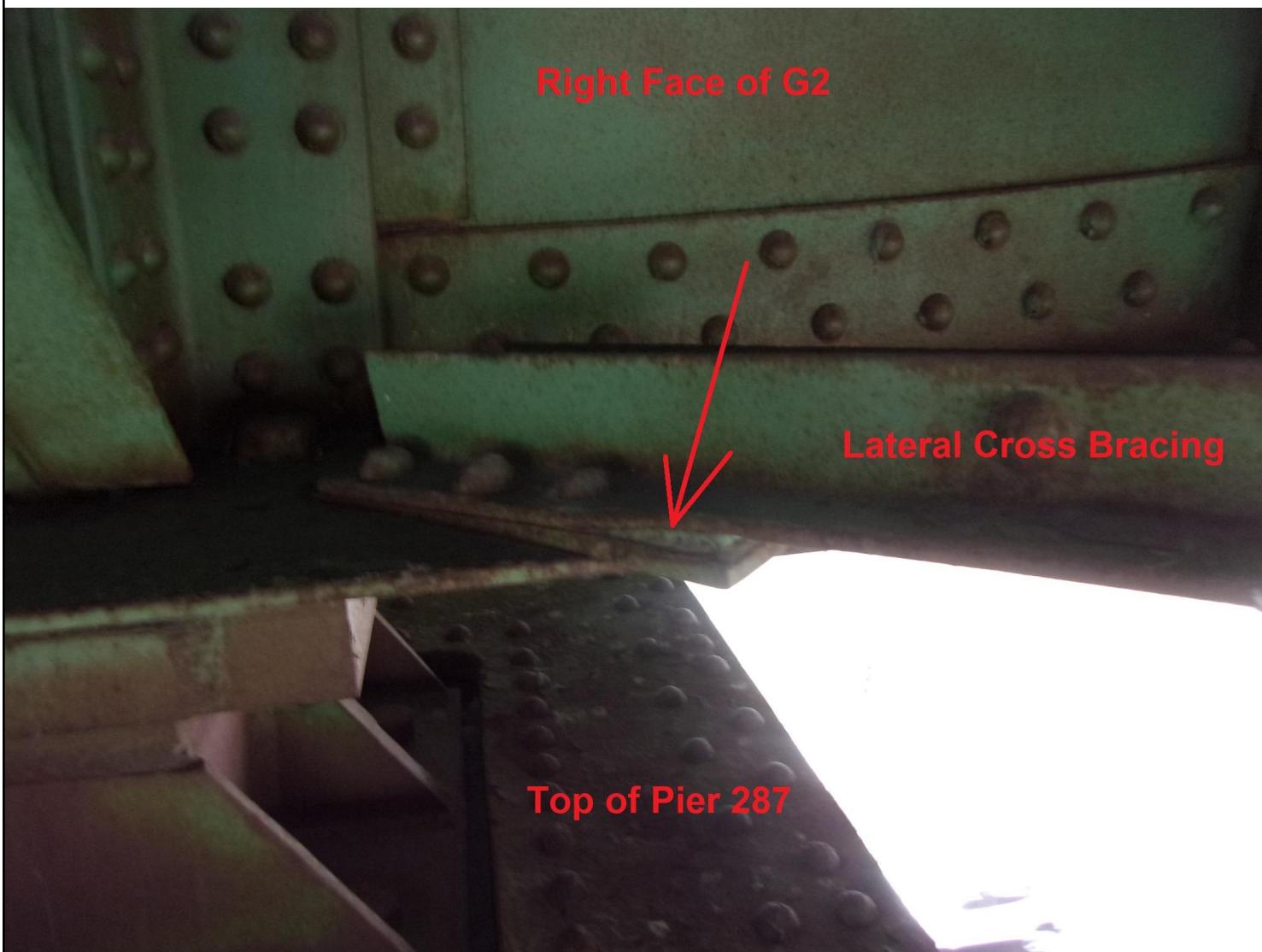
Photo Filename: 23\_113\_6840.JPG

**Vertical Drainage Pipe**

**Attachment Description:** The right face of lateral cross bracing between Girders G2-G3 in Span 288 at the right side of G2 at Pier 287. The lateral cross bracing exhibits heavy corrosion with severe section loss and several corrosion holes (circled). The lateral cross bracing still exhibits delaminated steel. Looking End and Left.

Photo Number: 4

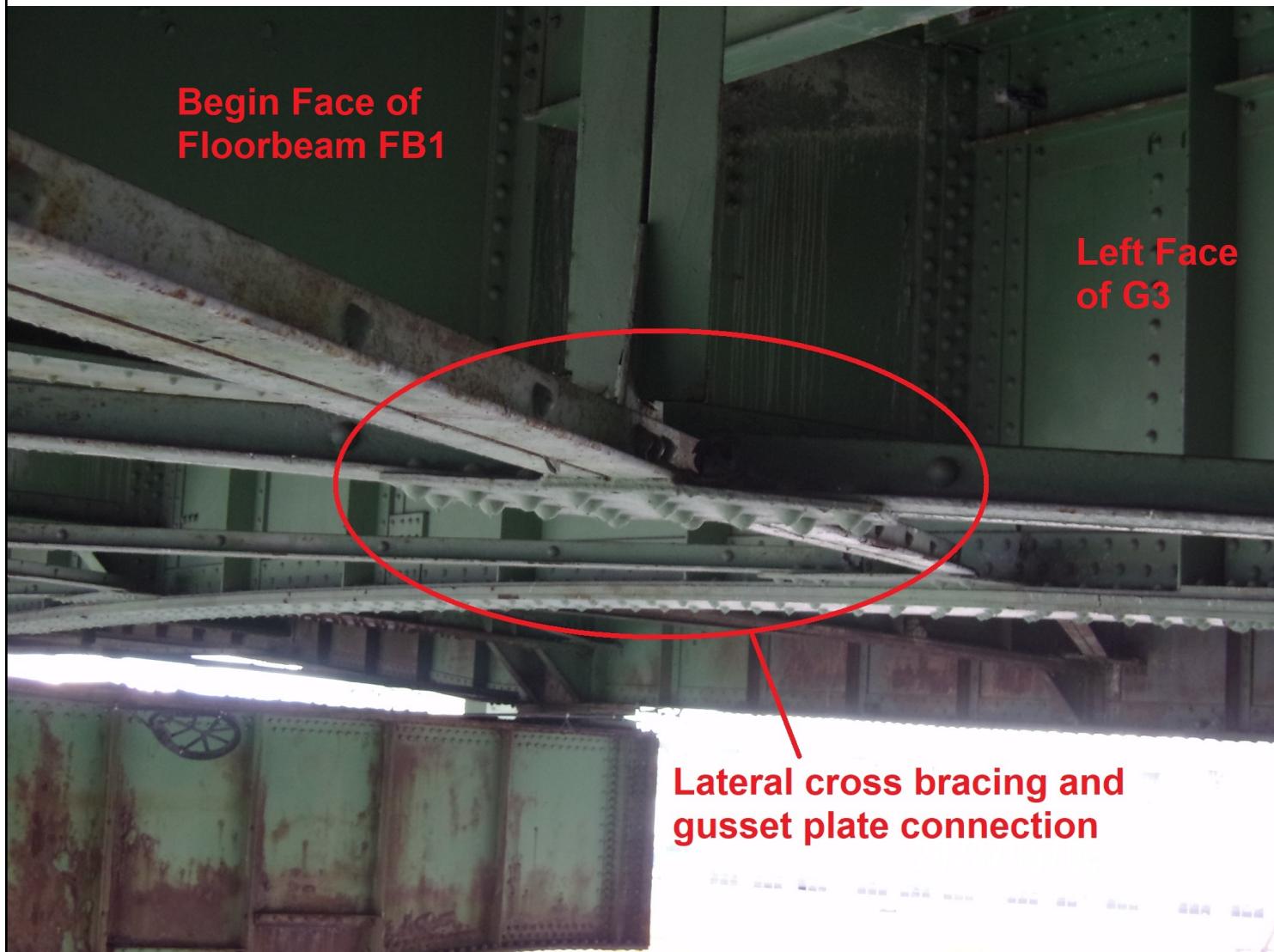
Photo Filename: 23\_113\_6843.JPG



**Attachment Description:** The right side of Girder G2 in Span 288 at Pier 287. The lateral bracing connection at the girder exhibits 1/2" pack rust. Looking Left.

Photo Number: 5

Photo Filename: 113\_6844.JPG



**Attachment Description:** The gusset plate at the middle of the cross bracing between Girders G2-G3 and between Pier 287 and Floorbeam FB1 in Span 288. The lateral bracing connection at the gusset plate is in generally good condition (circled). Looking End and Right.

Photo Number: **6**Photo Filename: **23\_113\_6845.JPG**

**Attachment Description:** The midspan of Stringer S9 between Pier 287 and Floorbeam FB1 in Span 288. The lateral bracing connection at the bottom of the stringer is in generally good condition. Looking End and Right.